Letter to the Editor

Some Observations on the Phenomenology of Thought Disorder; a Neglected Sign in Attention-Deficit Hyperperactivity Disorder

To the Editor:

In a recent article on thought disorder in ADHD & schizophrenia in children Caplan et al (2001), present empirical evidence for the presence of clinically identifiable thought disorder in children with ADHD, compare and contrast its phenomenology with that found in schizophrenic children. They found that whilst the internal distraction of "loose associations" are found primarily in schizophrenic children that" digression from the conversational text to referents in the immediate external surrounding (i.e., exophora) can contribute to the clinician's difficulty with following the topic of conversation in both ADHD and schizophrenia." In contrast to schizophrenic children they found evidence of ADHD children showing an "excess of lexical cohesion" in their speech; a semantical rather than an ideational connection The resultant effect to the listener being that "the connections between the speaker's ideas could appear to be tenuous and idiosyncratic"

The phenomenological differences described between these two important neuropsychiatric disorders are in keeping with earlier observations by the author (Jerome 1996). In this earlier work comparing the phenomenology of thought disorder in ADHD and Bi-polar Disorder the observation was made to further the discussion regarding the differential diagnosis of Bi-polar Illness and ADHD (Wozniak, et al 1995 and Pelletier, et al 1996) by comparing the phenomenology of thought disorder in the two conditions.

Clinical observations in children and adults with ADHD were offered as presumptive evidence of what was thought to represent a new phenomenological description of thought disorder in this condition; "Patients with a diagnosis of ADHD describe experiencing "multiple tracks" of thought. These tracks of thought were experienced simultaneously and sometimes in rapid succession switching between two or more different topics. Sometimes up to five or more tracks of thought ran in parallel. These multiple tracks of thought appeared not to have been previously described in the phenomenological literature. These patterns of thought may be described by an external observer as internal distractibility or difficulty maintaining focus on topic in conversation similar to the exophora described by Caplan et al but distinct in their origin; namely multiple tracts of thought not always observable to the external examiner unless enquired about directly. Whilst sometimes accompanied by rapid cluttered speech patterns the phenomenon will often be described by patients with a normal rate of speech, in comparison to Bipolar Patients where flight of ideas and pressure of thought as well as pressure of speech are present and often occur together." Since the initial report I have since noticed that this phenomenological description is often immediately recognisable by other family members; such as a parent with ADHD as applying to themselves and not recognised at all by the other non-clinical relatives who are unable to identify with what is often an invisible, internal, subjective experience only observable by introspection and not normally described by the patient.

Interestingly, child and adult ADHD patients in whom I observed this phenomenon often describe a reduction in the number of tracks of thought and a consequent reduction in internal distractibility with the use of stimulant medication. The thought disorder is reduced. This particular response to medication would seem quite distinct from that seen in Bi-polar Illness and in Schizophrenia where stimulant medication would be expected to either increase the severity of thought disorder or have no immediate effect.

This ADHD thought disorder pattern seems unrelated to observable mood state and is often noted in patients with ADHD who seem otherwise euthymic. In comparison, Bi-polar Illness would invariably be associated with hypomanic or manic mood change observable in the patient. In the initial report (Jerome 1996) I suggested that this difference in the phenomenology of thought disorder and its response to stimulants might be another useful avenue for empirical research in distinguishing ADHD and Bi-polar Disorders.

Caplan et al's argue that the association with cognitive correlates of thought disorder with IQ, Span of Apprehension accuracy, CPT signal/noise discrimination, and digit span scores in ADHD not seen with schizophrenic thought disorder might argue for the differentially involvement of frontotemporal neural networks giving rise to a different underlying substrate to the thought disorder in Schizophrenia and ADHD; namely "cognitive and attentional deficits in ADHD versus deficits in higher level linguistic processes in Schizophrenia". This argument is supported by the cognitive deficits of filtering and fusion deficits described by the author in ADHD child populations with deficits in speech prosody (Jerome 2000) and not currently described in children with schizophrenia. In order to test this hypothesis it would be instructive to test children with schizophrenic thought disorder to see if they show similar deficits in central audition to children with ADHD.

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Book Reviews

Attachment Disorganization

Edited by Judith Solomon and Carol George. The Guilford Press. 1999. 420 pp. \$67.50 hard cover. \$35.00 soft cover (Canadian).

Reactive Attachment Disorder (RAD) is under represented in the clinical literature in comparison to the impact it has on the children who suffer from it. All child psychiatrists will see psychopathology along the spectrum of attachment problems. Attachment disorganization in particular brings alarming results. Therefore, this book should be of interest to every clinician who has seen or may see these unfortunate children in their practice.

The book begins with an in-depth introduction to the subject, followed by a series of research articles outlining the outcomes of disorganized attachment. The theory and research of John Bowlby, Mary Ainsworth and other main authors and researchers in the field of attachment, including the editors Solomon and George, provide a foundation for many chapters. This book is about attachment theory and how and why it goes wrong. It is a basic text specifically aimed at understanding "disorganized" attachment behaviour (versus other attachment patterns such as insecure or ambivalent attachment behaviours). It is not a clinical text on Reactive Attachment Disorder (DSM IV) and in fact the diagnosis is never mentioned in the book. Yet, the underpinnings of every diagnostic criteria for RAD are laid down and explored in depth. For example, in comparison to the other types of attachment problems, the disorganized attachment process brought on freezing or stilling of expression, sequential or simultaneous contradictory behaviours and under directed or misdirected behavioural patterns.

The term "disorganization" in the title of the book is important. It is best compared with other examples of disorganized biopsychosocial systems, such as "Schizophrenic disorganization." Here, several domains of function are simultaneously disturbed. The term "disoriented" is sometimes used interchangeably with the term disorganized. It gives the reader a deeper feel for the degree of psychopathology these children suffer. Clinical snapshots in the book give some life to this degree of pathology, as for example:

"In the second reunion, Kate approached her mother with arms outstretched toward her mother. When she was about two feet away from making contact, she moved her arms to the side and abruptly circled away from her mother like a banking airplane. As she moved away, she had a dazed, blank expression on her face."

The early chapters go into great depth in understanding pathological mother-infant interactions, where both frightening and frightened maternal behaviours are important. It reviews the individual and physiological correlates of such interactions in the infant and toddler. Findings include, for example, more intense cardiac responsiveness and higher adrenal cortical activity. These children were easily and intensely alarmed. As young children try desperately to cope with their disorganization, they shift to a controlling behaviour, seen clinically as manipulative, punitive, intimidating,

rigid and humiliating behaviours, so disturbing to their caregivers. The emotional basis of the disorganized child is characterized either by under control of verbal abilities, (resulting in verbal and physical aggression to peers) or over control (resulting in expressionless withdrawal). Both are examples of affective dysregulation common to RAD.

Subsequent chapters review studies of the outcomes of these children in the school-age population. School personnel become very concerned and often initiate a referral when affective dyscontrol contributes to both social and cognitive dysfunction. Communications, motor and learning developmental patterns are also at risk, requiring assessment by speech and language clinicians, occupational therapists and psychometricians for psycho-educational testing. Even with this information, school personnel and parents need guidance that at the core of these problems remains attachment disorganization. Hopefully, a combination of these assessments and a clear clinical formulation will assist in ensuring the long term funding for the treatment and educational planning these children require, and for which we, as physicians, should advocate.

The authors also describe atypical populations affected by attachment disorganization: neurologically impaired children, specific pre-school populations, broken family's and malnourished children. Further chapters review the familiar link between disorganized attachment and adult dissociative disorders. The problem is, of course, that most children who suffer severely disorganized parenting also suffer from abuse and neglect. These children lie along an RAD/PTSD (Post Traumatic Stress Disorder) spectrum. A unique chapter late in the book tries to classify disorganized adult attachment. This is important for child psychiatry, as, more than we possibly realize, this relates to the parents we often see of RAD children. Here, very disorganized parents give way to another generation of disorganized attachment problems. Several decades of studies of deinstitutionalized mentally ill mothers reconfirm a clinical bind we have all seen in which children are at risk whether remaining with or taken from these mothers. More research is needed to address this important issue.

In summary, this is a basic science text, an in-depth orientation to and a series of psychological research studies of disorganized attachment. It is useful to child psychiatrist who desires a better understanding of attachment problems typically seen in the office, and, in particular, the problems of disorganized attachment. It is not a source of clinically useful information regarding the diagnosis or treatment of Reactive Attachment Disorder, but rather a way to understand the underpinnings of its psychopathology and diagnostic criteria.

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